PERAC AUDIT REPORT

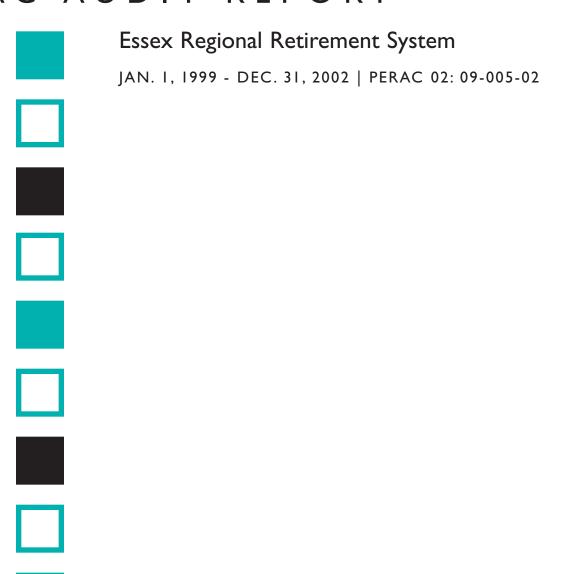






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August 25, 2004

The Public Employee Retirement Administration Commission has completed an examination of the Essex Regional Retirement System pursuant to G.L. c. 32, § 21. The examination covered the period from January 1, 1999 to December 31, 2002. This audit was conducted in accordance with the accounting and management standards established by the Public Employee Retirement Administration Commission in regulation 840 CMR 25.00. Additionally, all supplementary regulations approved by PERAC and on file at PERAC are listed in this report.

In our opinion, the financial records and management functions are being performed in conformity with the standards established by the Public Employee Retirement Administration Commission with the exception of those noted in the findings presented in this report.

In closing, I acknowledge the work of examiners James Sweeney and James Ryan who conducted this examination and express appreciation to the Board of Retirement and staff for their courtesy and cooperation.

Sincerely,

Joseph E. Connarton

Joseph E. Connaction

Executive Director

EXPLANATION OF FINDINGS AND RECOMMENDATIONS

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

1. Annual Statement

The Excess Income to the Pension Reserve line item on the Investment Income page of the 2002 Annual Statement is incorrect for the years 2000-2002. This is due to an incorrect journal entry being made to GL account 4828, and 4829 (Increase/Decrease in Amortization of Fixed Income Securities) since 1999. These two account numbers have been discontinued by PERAC as of 12/31/1999 (please refer to PERAC Memo #46/1999.)

Pooled fund balances reported on schedule 6 of the Annual Statement do not reflect the GL balance and instead reflect the custodian bank balance.

Recommendation:

Immediately discontinue the use of GL account 4828 and 4829. Unrealized gains and losses resulting from market value adjustments must be reported in GL accounts 4886 and 4887 respectively.

All investment balances reported on the supplemental schedules must reflect their corresponding GL balances.

Board Response:

The use of accounts 4828 and 4829 for one isolated entry was an error. We were aware they had been discontinued. Since they close into the same account, we believe the Pension Reserve Balance was correct.

2. Reconciliation of Cash Account

The 12/16/02 bank reconciliation representing the Eastern Bank Checking and Money Market balances in General Ledger (GL) account 1040 did not reflect an accurate GL cash balance or take into account deposit timing differences. For example, deposits of \$485,019.56 that cleared the bank and were not entered in the GL as of 12/16/02 were not identified as reconciling items.

Recommendation:

The monthly bank reconciliation must reflect accurate GL and bank account balances. All reconciling items, which reflect differences between the bank and GL, must be identified and documented.

Board Response:

The cash accounts are reconciled at month's end when all deposits have been recorded. As a county system, receipts from the 47 governmental units are posted on a monthly voucher and recorded as a lump sum at month's end. The checks, however, are deposited in a timely manner. The statements are reconciled to balances in spreadsheets that reconcile to the General Ledger at month's end.

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

3. Pooled Funds

The 12/31/02 balance on State Street Bank's certified list of assets for Pooled Investments is \$552,902.61 greater than the GL. The variance relates to 9 pooled fund balances which do not reflect the 12/31/02 balances reported by the investment managers.

The System is not reviewing the pooled fund investment manager reported balances against the balances reported by the custodian bank.

Recommendation:

The System should ensure that the custodian bank reports a year-end pooled fund balance that agrees with the year-end balance reported by the pooled fund investment manager. In addition, the System must reconcile the investment-manager reported balances against the custodian bank balances on at least a quarterly basis.

Board Response:

We will request that State Street Corp. issue a revised report that reflects the year end values instead of reporting them in the January and February and March statements.

4. Payroll Processing

The Retirement Board payroll is manually processed. When the County was abolished the payroll system was not updated. During the audit period, payroll dates of the Chairman and staff have been inconsistent. The draw system allowed payroll advances in which no deductions for taxes were taken. These advances were netted and all deductions were made on the end of the month payroll when the actual payroll was processed. The Chairman's monthly \$250 stipend was paid separately, however, after the County was abolished in July 1999, the stipend was lumped in with his monthly salary instead of being paid and recorded separately to GL account 5118, "Board Member Stipend".

Recommendation:

The Board should adopt a modern payroll system with fixed payroll dates and all deductions taken out for each pay period. The Chairman's monthly stipend should be paid separately in the month earned and charged to GL account 5118 (Board Member Stipend). Additionally, the Board should adopt formal personnel rules and regulations.

Board Response:

We have upgraded to a direct deposit payroll system. Pay dates will be the 15th and 30th of each month, occurring on Friday previous if that date lands on a weekend. The retirement, state, federal and med tax deductions will be taken from each check and paid to the appropriate vendors.

The Chairman's check was always attributed to the right account. At times it wasn't stated separately on the payroll, but the breakdown was always entered correctly into TACS.

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

We will be writing and adopting Rules and Regulations in the next few months, as well. In the meantime, we continue to follow the rules and regulations that were in effect for the County of Essex prior to the abolition of County government in 1999.

5. Membership

PERAC auditors sampled members' deduction rates to determine that correct percentages are being withheld, and that the additional 2% deduction is withheld from those members who make over \$30,000 and became members after January 1, 1979. The sample yielded a 20% error rate. There was a 5% error rate in the base deduction rate and a 15% error rate in the additional 2% deduction for income over \$30,000. Errors were detected in 43% of the member units.

Recommendation:

The Board must comply with G.L. c. 32, § 22 (1)(b) and (b)(1/2), and PERAC MEMO # 43/1999, defining 2% additional deductions. The Board should initiate a system of obtaining detailed payroll information from each of the units, including the following member information:

- 1. Name
- 2. Social Security number or employee number
- 3. Compensation by type: total, regular, overtime and other earnings
- 4. Contribution amount
- 5. 2% additional contribution
- 6. Contribution rate
- 7. Membership date
- 8. Any other information deemed appropriate

This data must be routinely reviewed by the Board to ensure proper deductions are being withheld. Unit Treasurers or other disbursing officers in charge of payroll must certify to the Board that deductions were taken in accordance with the provisions of G.L. c. 32, § 22.

A training program should be set up for all payroll personnel, including representatives from outside payroll services. All persons charged with processing retirement deductions should receive copies of all memos or notices containing new regulations or other changes involving eligibility or contribution rates.

Board Response:

The Board has been working on the membership problems for a number of years. We have notified our units of the information that is required, however, many of them do not and cannot comply. We are currently auditing the accounts for incorrect deduction rates. We are also planning site visits with individual payroll clerks as well as developing a payroll manual for our governmental units and plan annual training sessions. It is our opinion that PERAC should design payroll services bids

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

to include all the required information so that a payroll company who can't comply can't be awarded the bid. It is the intention of the Board to file legislation to require this.

6. Retiree Superannuation Calculation

The Board is calculating the three-year average salary from recorded deduction amounts. If the Board is not receiving the detailed payroll information mentioned above, the deductions may be in error, thereby generating an incorrect average salary.

Recommendation:

The Board must receive the detailed payroll information as stated above in order to ensure proper calculation of average salary.

Board Response:

From the time of the last audit, the Board started sending requests for the three year averages to the corresponding payroll departments and what we received clearly did not indicate what the 3 year average was, however, we will continue to send these salary requests and compare them with the deductions that are posted to the individual's account.

Final Determination

PERAC auditor staff will follow-up in six (6) months to ensure that appropriate actions have been taken regarding all findings.

STATEMENT OF LEDGER ASSETS AND LIABILITIES

	FOR THE PERIOD ENDING DECEMBER 31,							
ASSETS	2002	2001	2000	1999				
Cash	\$5,823,668	\$9,870,422	\$8,626,557	\$6,533,929				
Short Term Investments	102,456	102,456	100,000	2,394,943				
Fixed Income Securities (at book value)	40,232,907	68,493,377	70,001,791	68,309,347				
Equities	46,615,112	56,317,340	56,049,184	60,007,009				
Pooled Short Term Funds	0	0	0	0				
Pooled Domestic Equity Funds	16,042,497	24,190,647	29,894,647	28,876,510				
Pooled International Equity Funds	13,461,431	16,199,637	19,827,085	21,657,399				
Pooled Global Equity Funds	0	0	0	0				
Pooled Domestic Fixed Income Funds	42,005,041	6,171,992	0	0				
Pooled International Fixed Income Funds	0	0	0	0				
Pooled Global Fixed Income Funds	0	0	0	0				
Pooled Alternative Investment Funds	3,545,153	4,491,603	5,728,715	4,169,640				
Pooled Real Estate Funds	10,495,716	12,404,131	9,709,800	7,867,915				
Pooled Domestic Balanced Funds	0	0	0	0				
Pooled International Balanced Funds	0	0	0	0				
PRIT Cash Fund	0	0	0	0				
PRIT Core Fund	0	0	0	0				
Interest Due and Accrued	482,729	1,021,247	1,113,256	1,058,357				
Accounts Receivable	670,874	794,563	2,304,043	747,302				
Accounts Payable	(<u>117,282</u>)	(2,989,462)	(1,901,174)	(3,820,986)				
TOTAL	\$179,360,302	\$197,067,952	\$201,453,905	\$197,801,365				
FUND BALANCES								
Annuity Savings Fund	\$60,752,218	\$57,874,697	\$53,026,183	\$48,828,264				
Annuity Reserve Fund	19,933,043	17,271,202	17,054,465	16,799,249				
Pension Fund	19,806,783	23,152,056	24,942,475	27,655,256				
Military Service Fund	10,554	10,409	10,215	10,018				
Expense Fund	0	0	0	0				
Pension Reserve Fund	78,857,703	98,759,588	106,420,567	104,508,577				
TOTAL	\$ <u>179,360,302</u>	\$ <u>197,067,952</u>	\$ 201,453,905	\$ <u>197,801,365</u>				

STATEMENT OF CHANGES IN FUND BALANCES

	Annuity Savings Fund	Annuity Reserve Fund	Pension Fund	Military Service Fund	Expense Fund	Pension Reserve Fund	Total All Funds
Beginning Balance (1999)	\$56,493,881	\$15,293,705	\$27,537,330	\$14,747	\$0	\$80,695,002	\$180,034,664
Receipts	8,412,792	470,247	12,964,830	210	1,274,797	23,803,560	46,926,435
Interfund Transfers	(2,959,781)	2,968,516	(13812.36)	(4938.70)	0.00	10,016	0
Disbursements	(13,118,627)	(1,933,219)	(<u>12833090.91</u>)	0.00	(1274796.55)	<u>0</u>	$(\underline{29,159,734})$
Ending Balance (1999)	48,828,264	16,799,249	27,655,256	10,018	0	104,508,577	197,801,365
Receipts	7,711,342	502,071	10,471,582	196	1,915,639	1,909,613	22,510,443
Interfund Transfers	(1,822,948)	1,820,571	0	0	0	2,377	0
Disbursements	(1,690,476)	(2,067,425)	(13,184,363)	<u>0</u>	(<u>1,915,639</u>)	<u>0</u>	$(\underline{18,857,903})$
Ending Balance (2000)	53,026,183	17,054,465	24,942,475	10,215	0	106,420,567	201,453,905
Receipts	8,352,676	501,962	12,623,118	194	1,726,598	(7,661,043)	15,543,506
Interfund Transfers	(1,812,188)	1,812,124	0	0	0	64	0
Disbursements	(<u>1,691,974</u>)	(2,097,349)	(14,413,537)	<u>0</u>	(1,726,598)	<u>0</u>	(<u>19,929,459</u>)
Ending Balance (2001)	57,874,697	17,271,202	23,152,056	10,409	0	98,759,588	197,067,952
Receipts	8,883,876	515,625	11,136,312	146	1,440,178	(19,915,996)	2,060,141
Interfund Transfers	(4,387,504)	4,383,280	(9,887)	0	0	14,111	0
Disbursements	(<u>1,618,851</u>)	(2,237,064)	(14,471,698)	<u>0</u>	(<u>1,440,178</u>)	<u>0</u>	(<u>19,767,791</u>)
Ending Balance (2002)	\$ <u>60,752,218</u>	\$ <u>19,933,043</u>	\$ <u>19,806,783</u>	\$ <u>10,554</u>	\$ <u>0</u>	\$ <u>78,857,703</u>	\$ <u>179,360,302</u>

STATEMENT OF INCOME

	FOR THE F	DECEMBER 31,		
	2002	2001	2000	1999
Annuity Savings Fund:				
Members Deductions	\$7,148,886	\$6,559,680	\$5,914,387	\$6,395,698
Transfers from other Systems	599,813	666,730	649,204	526,011
Member Make Up Payments and Redeposits	354,845	148,449	155,076	358,011
Investment Income Credited to Member Accounts	780,331	977,817	992,676	1,133,072
Sub Total	8,883,876	8,352,676	7,711,342	8,412,792
Annuity Reserve Fund:				
Investment Income Credited Annuity Reserve Fund	<u>515,625</u>	<u>501,962</u>	502,071	470,247
Pension Fund:				
3 (8) (c) Reimbursements from Other Systems	308,753	301,076	293,342	284,212
Received from Commonwealth for COLA and				
Survivor Benefits	1,042,297	374,337	817,766	2,044,416
Pension Fund Appropriation	9,785,262	11,947,705	9,360,474	10,636,203
Sub Total	11,136,312	12,623,118	10,471,582	12,964,830
Military Service Fund:				
Contribution Received from Municipality on Account				
of Military Service	0	0	0	0
Investment Income Credited Military Service Fund	<u>146</u>	<u>194</u>	<u>196</u>	<u>210</u>
Sub Total	<u>146</u>	<u>194</u>	<u>196</u>	<u>210</u>
Expense Fund:				
Expense Fund Appropriation	0	0	0	0
Investment Income Credited to Expense Fund	1,440,178	1,726,598	1,915,639	1,274,797
Sub Total	<u>1,440,178</u>	<u>1,726,598</u>	1,915,639	1,274,797
Pension Reserve Fund:				
Federal Grant Reimbursement	49,268	36,960	30,972	50,776
Pension Reserve Appropriation	5,533	29,896	206,823	952,711
Interest Not Refunded	29,011	26,253	18,931	37,395
Excess Investment Income	(19,999,808)	(7,754,152)	1,652,887	22,762,677
Sub Total	(<u>19,915,996</u>)	$(\underline{7,661,043})$	<u>1,909,613</u>	23,803,560
TOTAL RECEIPTS	\$ <u>2,060,141</u>	\$ <u>15,543,506</u>	\$ <u>22,510,443</u>	\$ <u>46,926,435</u>

STATEMENT OF DISBURSEMENTS

	FOR THE F	PERIOD ENDING	DECEMBER 31,	
Annuity Savings Fund:	2002	2001	2000	1999
Refunds to Members	\$765,434	\$834,893	\$907,595	\$1,176,199
Transfers to other Systems	853,417	857,081	782,881	11,942,429
Sub Total				
	<u>1,618,851</u>	<u>1,691,974</u>	<u>1,690,476</u>	13,118,627
Annuity Reserve Fund:				
Annuities Paid	2,154,803	2,021,980	1,948,133	1,802,124
Option B Refunds	82,260	<u>75,370</u>	119,291	<u>131,095</u>
Sub Total	2,237,064	2,097,349	2,067,425	1,933,219
Pension Fund:				
Pensions Paid				
Regular Pension Payments	10,527,968	9,898,380	9,574,446	8,683,752
Survivorship Payments	977,893	937,488	899,405	799,789
Ordinary Disability Payments	288,299	309,718	312,949	304,553
Accidental Disability Payments	1,741,172	1,677,851	1,627,756	1,565,189
Accidental Death Payments	560,691	552,095	513,332	519,401
Section 101 Benefits	66,549	64,698	52,671	49,063
3 (8) (c) Reimbursements to Other Systems	309,125	973,307	203,806	911,343
State Reimbursable COLA's Paid	_	-	-	-
Chapter 389 Beneficiary Increase Paid	-	-	-	-
Sub Total	14,471,698	14,413,537	13,184,363	12,833,091
Military Service Fund:				
Return to Municipality for Members Who				
Withdrew Their Funds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Expense Fund:				
Board Member Stipend	12,000	12,000	14,000	15,000
Salaries	363,468	340,118	286,035	180,662
Legal Expenses	57,070	60,391	75,657	133,282
Medical Expenses	42	60	0	0
Travel Expenses	28,159	20,145	17,490	14,237
Administrative Expenses	147,739	208,701	542,354	53,063
Furniture and Equipment	32,485	81,958	82,774	16,868
Management Fees	609,765	846,090	697,027	693,991
Custodial Fees	86,671	101,760	104,593	90,574
Consultant Fees	102,779	55,375	95,709	77,118
Sub Total	1,440,178	1,726,598	1,915,639	1,274,797
TOTAL DISBURSEMENTS	\$ <u>19,767,791</u>	\$ <u>19,929,459</u>	\$ <u>18,857,903</u>	\$ <u>29,159,734</u>

INVESTMENT INCOME

	FOR THE P	DECEMBER 31,		
	2002	2001	2000	1999
Investment Income Received From:				
Cash	131264.15	329318.75	\$542,482	\$309,902
Short Term Investments	0	39,773	82,735	470,347
Fixed Income	3,228,378	5,516,727	5,594,393	4,616,077
Equities	2,581,441	689,621	645,329	713,032
Pooled or Mutual Funds	0	332,447	227,103	149,204
Commission Recapture	27,728	16,261	13,680	22,485
TOTAL INVESTMENT INCOME	5,968,810	6,924,148	7,105,722	6,281,047
Plus:				
Increase in Amortization of Fixed Income Securities	-	-	-	366,545
Realized Gains	1,803,350	4,559,914	8,203,148	10,166,043
Unrealized Gains	14,461,632	11,199,772	12,414,621	26,727,328
Interest Due and Accrued on Fixed Income Securities -				
Current Year	482,729	1,021,247	1,113,256	1,058,357
Sub Total	16,747,712	16,780,932	21,731,025	38,318,273
Less:				
Decrease in Amortization of Fixed Income Securities	-	-	-	(4,404,333)
Paid Accrued Interest on Fixed Income Securities	(265,328)	(727,520)	(1,050,375)	(755,645)
Realized Loss	(11,021,039)	(6,568,489)	(8,271,308)	(6,183,755)
Unrealized Loss	(24,166,968)	(20,105,087)	(15,647,745)	(6,748,873)
Custodial Fees Paid	-	-	-	-
Consultant Fees Paid	-	-	-	-
Management Fees Paid	-	-	-	-
Board Member Stipend Interest Due and Accrued on Fixed Income Securities -	-	-	-	-
Prior Year	(1,021,247)	(1,113,256)	(1,058,357)	(865,711)
Sub Total	(36,474,582)	(28,514,353)	(26,027,785)	(18,958,317)
NET INVESTMENT INCOME	(13,758,059)	(4,809,273)	2,808,962	25,641,003
Income Required:	`	`		
Annuity Savings Fund	780,331	977,817	992,676	1,133,072
Annuity Reserve Fund	515,625	501,962	502,071	470,247
Military Service Fund	146	194	196	210
Expense Fund	1,440,178	1,726,598	1,915,639	1,274,797
•			·	
TOTAL INCOME REQUIRED	<u>2,736,280</u>	<u>3,206,571</u>	<u>3,410,581</u>	<u>2,878,326</u>
Net Investment Income	(13,758,059)	(4,809,273)	2,808,962	25,641,003
Less: Total Income Required	2,736,280	3,206,571	3,410,581	2,878,326
EXCESS INCOME TO THE PENSION		<u> </u>		
RESERVE FUND	(\$16,494,339)	(<u>\$8,015,843</u>)	(<u>\$601,619</u>)	\$ <u>22,762,677</u>

STATEMENT OF ALLOCATION OF INVESTMENTS OWNED

(percentages by category)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

	MARKET VALUE	PERCENTAGE OF TOTAL ASSETS	PERCENTAGE ALLOWED*
Cash	\$5,823,668	3.27%	100
Short Term	102,456	0.06%	100
Fixed Income	40,232,907	22.56%	40 - 80
Equities	46,615,112	26.14%	70
Pooled Domestic Equity Funds	16,042,497	9.00%	
Pooled International Equity Funds	13,461,431	7.55%	10
Pooled Domestic Fixed Income Funds	42,005,041	23.56%	
Pooled Alternative Investment Funds	3,545,153	1.99%	5
Pooled Real Estate Funds	10,495,716	5.89%	5
PRIT Cash Fund		0.00%	
PRIT Core Fund		0.00%	100
GRAND TOTALS	\$ <u>178,323,982</u>	<u>100.00</u> %	

For the year ending December 31, 2002, the rate of return for the investments of the Essex Regional Retirement System was -8.42%. For the five year period ending December 31, 2002, the rate of return for the investments of the Essex Regional Retirement System averaged 4.34%. For the 18-year period ending December 31, 2002, since PERAC began evaluating the returns of the retirement systems, the rate of return of the investments of the Essex Regional Retirement System was 9.88%.

^{*} The book value differs from the market value for individually owned Fixed Income Securities which are valued at amortized cost which is the original cost of the investment plus or minus any bond discount or bond premium calculated ratably to maturity. All other investments are reflected at their quoted market value.

SUPPLEMENTARY INVESTMENT REGULATIONS

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

The Essex Regional Retirement System submitted the following supplementary investment regulations, which were approved by PERAC on:

March 30, 1989

20.06(8) Sales of fixed income investments with maturities exceeding one year shall not exceed 150% of the market value of all fixed income obligations in any twelve-month period, excluding cash and short term obligations.

20.07(6) Sales of equity investments shall not exceed 100% of the average market value of all equity holdings in any twelve-month period.

January 4, 1990

20.04(6) Equities of foreign corporations, including American Depository Receipts listed on a United States stock exchange or traded over the counter in the United States, provided that all such investments are denominated in U.S. currency, and that the total of all such investments shall not exceed 10% of the total book value of equity investments.

February 10, 1994

16.02(4) The board may employ a custodian bank and may charge such expenses against earned income from investments provided that such expenses shall not exceed in any one-year .08% of the value of the fund.

20.04(1) United States based corporations and equities of foreign corporations.

20.07(5) Equity investments shall be made only in securities listed on a United States stock exchange, traded over the counter in the United States, or listed and traded on a foreign exchange.

October 19, 1995

20.07(9) Commingled real estate shall not exceed 5% of the total book value of the portfolio at the time of purchase provided that:

- (a) the retirement board does not participate in the selection of personnel responsible for making real estate investments and should this be required, prior to any participation by the board, the board shall consult with PERAC to determine the appropriate course of action:
- (b) such personnel retain authority in the decision making process, and
- (c) Should an investment in real estate result in the direct ownership of real estate or mortgage indebtedness, such shall be permitted only until such time as divestiture is prudent.

SUPPLEMENTARY INVESTMENT REGULATIONS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

January 25, 1996

21.01

- (3) Futures Contracts other than as follows:
- (a) Forward Currency Contracts may be written against securities in the international portfolio by an investment advisor registered under the Investment Advisors Act of 1940 and who has been granted a waiver from PERAC for international investments.
- (b) Forward Currency Contracts may be written against securities in the international portfolio to a maximum of twenty-five percent (25%) of the international portfolio's non-dollar holdings at market value. Speculative currency positions unrelated to underlying portfolio holdings are strictly prohibited.

September 3, 1997

20.08(e) Enrollment in the Securities Lending Program offered by Northern Trust Company for the Sector Plus Group Trust provided that the lending of securities is limited to brokers, dealers, and financial institutions and that the loan is collateralized by cash or United States Government securities according to applicable regulatory requirements.

20.03(1) Equity investments shall not exceed 70% of the portfolio valued at market, including international equities which shall not exceed 10% of the portfolio valued at market.

20.03(2) At least 30% but no more than 80% of the total portfolio valued at market shall Consist of fixed income investments with a maturity of more than one year.

20.06(2) Bonds shall have a minimum quality rating of Baa or equivalent as rated by One or more recognized bond rating services, however, 10% of the market value of fixed income investments may be invested in bonds with a minimum quality rating of Ba or equivalent, including 6% of the market value of fixed income investments which may be invested in bonds with a minimum quality rating of CCC- as rated by one or more recognized bond Rating services.

20.06(4) Fixed income holdings which are downgraded by one or more recognized rating services to below a Baa or equivalent rating must be sold within a reasonable period of time not to exceed one year, however, 10% of the market value of fixed income investments may be invested in bonds with a minimum quality rating of Ba or equivalent, including 6% of the market value of fixed income investments which may be invested in bonds with a minimum quality rating of CCC- as rated by one or more recognized bond rating services.

SUPPLEMENTARY INVESTMENT REGULATIONS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

June 30,1998

20.09(1) Venture capital investments shall not exceed 3% of the total market value of The portfolio at the time of the investment provided that in any system with assets in excess of nineteen million dollars, venture capital investments may be made up to an amount equal to 5% of the total market value of the portfolio at the time of investment, shall be considered a separate asset class, and provided further that:

- (a) the board does not participate in the selection of the personnel responsible for making venture capital investments or otherwise exercise discretion in business affairs and should this be required, prior to any participation by the board, the board shall consult with PERAC to determine the appropriate course of action;
- (b) such personnel retain authority in the decision making process, and
- (c) should an investment in venture capital result in the direct ownership of securities, such shall be permitted only until such time as divestiture is Prudent.

20.09(2) Venture capital investments shall only be made in venture capital funds operated by venture capital firms having their principal places of business in the United States.

20.09(3) All venture capital investments shall be made in companies which have their Principal places of business in the United States.

January 7, 2000

16.08 In accordance with PERAC Investment Guideline 99-3, the Essex County Retirement Board may invest in Boston Millennia Partners II, L.P. The board is an investor in Boston Millennia Partners I, and has submitted the required documentation in support of this request.

July 26, 2000

We have received your Board's response to PERAC Memo #44/1999 regarding Supplemental Investment Regulations. In accordance with your decision, self-imposed restrictions on your Board's percentage of holdings in specific asset classes have been rescinded. Your Board must, however, make asset allocation decisions subject to your fiduciary duty.

Please note that the restrictions pertaining to real estate and alternative investments contained in 840 CMR 19.01 remain in effect.

SUPPLEMENTARY INVESTMENT REGULATIONS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

February 12, 2002

16.08 In accordance with Investment Guideline 99-2, the Essex Regional Retirement Board is modifying its fixed income mandate with State Street Research & Management and Financial Management Advisors. In order to save on management and custody fees, the mandates are changing from separate account management to commingled funds. The new funds are the "State Street Research Core Fixed Income Fund" and the "FMA High Yield Appreciation Limited Partnership". Both changes involve identical portfolio management teams and investment objectives.

October 23, 2003

16.08 In accordance with PERAC Investment Guideline 99-2, the Essex Regional Retirement Board is authorized to make a minor modification to its large cap equity mandate with Freedom Capital Management Company. As part of its rebalancing program, the Board will supplement its current large cap equity separate account and its commingled Equity Style Fund with an allocation to Freedom's "Style-Weighted Concentrated Fund". This fund will incorporate the best ideas in both growth and value stocks, has the same S&P 500 benchmark, and is managed by the same team as Freedom's other large cap products

NOTES TO FINANCIAL STATEMENTS

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

NOTE 1 - THE SYSTEM

The plan is a contributory defined benefit plan covering all Essex Regional Retirement System member unit employees deemed eligible by the retirement board, with the exception of school department employees who serve in a teaching capacity. The Teachers' Retirement Board administers the pensions of such school employees.

Instituted in 1937, the System is a member of the Massachusetts Contributory Retirement System and is governed by Chapter 32 of the Massachusetts General Laws. Membership in the plan is mandatory immediately upon the commencement of employment for all permanent, full-time employees.

The system provides for retirement allowance benefits up to a maximum of 80% of a member's highest three year average annual rate of regular compensation. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

Members become vested after ten years of creditable service. A superannuation retirement allowance may be received upon the completion of twenty years of service or upon reaching the age of 55 with ten years of service. Normal retirement for most employees occurs at age 65 (for certain hazardous duty and public safety positions, normal retirement is at age 55).

A retirement allowance consists of two parts: an annuity and a pension. A member's accumulated total deductions and a portion of the interest they generate constitute the annuity. The differential between the total retirement benefit and the annuity is the pension. The average retirement benefit is approximately 75 - 85% pension and 15 - 25% annuity.

Active members contribute either 5, 7, 8, or 9% of their gross regular compensation. Members joining the retirement system after January 1, 1979 must contribute an additional 2% on regular compensation earned at a rate in excess of \$30,000. The percentage rate is keyed to the date upon which an employee's membership commences. These deductions are deposited in the Annuity Savings Fund and earn interest at a rate determined by the Executive Director of PERAC according to statute. When a member's retirement becomes effective, his/her deductions and related interest are transferred to the Annuity Reserve Fund. Any cost-of-living adjustment granted between 1981 and 1997 and any increase in other benefits imposed by state law during that period are borne by the state.

The pension portion of any retirement benefit is paid from the Pension Fund of the System. The governmental unit employing the member must annually appropriate and contribute the amount of current year pension payments as indicated on the most recent funding schedule as approved by PERAC's Actuary. Until recently, retirement systems were paying only the actual retirement

NOTES TO FINANCIAL STATEMENTS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

benefits that were due each year. Systems had no statutory authorization to put aside any money for the future benefits of employees who are now working. Large unfunded liabilities resulted from operating upon this pay-as-you-go basis. In 1977, legislation authorized local governments to appropriate funds to meet future pension obligations.

In 1983, additional legislation was passed requiring the transfer of investment earnings (in excess of the amount credited to member accounts) into the Pension Reserve Fund. These initiatives have significantly reduced the rate of growth of the retirement systems' unfunded liabilities, and in some systems have actually eliminated such liability.

Administrative expenses are funded through investment income of the system.

Members who become permanently and totally disabled for further duty may be eligible to receive a disability retirement allowance. The amount of benefits to be received in such cases is dependent upon several factors including: whether or not the disability is work related, the member's age, years of creditable service, level of compensation, veteran's status, and group classification.

Employees who resign from service and who are not eligible to receive a retirement allowance or are under the age of 55 are entitled to request a refund of their accumulated total deductions. In addition, depending upon the number of years of creditable service, such employees are entitled to receive either zero (0%) percent, fifty (50%) percent, or one hundred (100%) percent of the regular interest which has accrued upon those deductions. Survivor benefits are extended to eligible beneficiaries of members whose death occurs prior to or following retirement.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES

The accounting records of the System are maintained on a calendar year basis in accordance with the standards and procedures established by the Executive Director of Public Employee Retirement Administration Commission.

The <u>Annuity Savings Fund</u> is the fund in which members' contributions are deposited. Active members contribute either 5, 7, 8, or 9% of their gross regular compensation. Voluntary contributions, redeposits, and transfers to and from other systems, are also accounted for in this fund. Members' contributions to the fund earn interest at a rate determined by PERAC. Interest for some members who withdraw with less than ten years of service is transferred to the Pension Reserve Fund. Upon retirement, members' contributions and interest are transferred to the Annuity Reserve Fund. Dormant account balances must be transferred to the Pension Reserve Fund after a period of ten years of inactivity.

NOTES TO FINANCIAL STATEMENTS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

The <u>Annuity Reserve Fund</u> is the fund to which a member's account is transferred upon retirement from the Annuity Savings Fund and Special Military Service Credit Fund. The annuity portion of the retirement allowance is paid from this fund. Interest is credited monthly to this fund at the rate of 3% annually on the previous month's balance.

The <u>Special Military Service Credit Fund</u> contains contributions and interest for members while on a military leave for service in the Armed Forces who will receive creditable service for the period of that leave.

The Expense Fund contains amounts transferred from investment income for the purposes of administering the retirement system.

The <u>Pension Fund</u> contains the amounts appropriated by the governmental units as established by PERAC to pay the pension portion of each retirement allowance.

The <u>Pension Reserve Fund</u> contains amounts appropriated by the governmental units for the purposes of funding future retirement benefits. Any profit or loss realized on the sale or maturity of any investment or on the unrealized gain of a market valued investment as of the valuation date is credited to the Pension Reserve Fund. Additionally, any investment income in excess of the amount required to credit interest to the Annuity Savings Fund, Annuity Reserve Fund, and Special Military Service Credit Fund is credited to this Reserve account.

The <u>Investment Income Account</u> is credited with all income derived from interest and dividends of invested funds. At year-end the interest credited to the Annuity Savings Fund, Annuity Reserve Fund, Expense Fund, and Special Military Service Credit Fund is distributed from this account and the remaining balance is transferred to the Pension Reserve Fund.

NOTE 3 - SUPPLEMENTARY MEMBERSHIP REGULATIONS

The Essex Regional Retirement System submitted the following supplementary membership regulations, which were approved by PERAC on:

September 24, 1996

1) That an employee must work a minimum of twenty hours per week to meet the requirements of membership in the retirement system. A permanent part-time employee who does not work a fixed number of hours per week shall become a member of the system after a period of ninety (90) days if his average work week calculated at the end of the ninety (90) day period averages twenty hours or more.

NOTES TO FINANCIAL STATEMENTS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

NOTE 3 - SUPPLEMENTARY MEMBERSHIP REGULATIONS (Continued)

- 2) Creditable Service That a full-time employee will receive one (1) full year of creditable service for each year employed. A part-time employee whose position has always been part-time is granted full creditable service. A part-time employee who becomes fulltime has the part-time service prorated.
- 3) That if an elected official is not a member of the retirement system before their election by popular vote, they do not have to join the system; but they may join by applying for membership, in writing, within ninety (90) days of assuming their elective office.

Travel Regulation

Sept 9,2003

The Board has adopted Travel Supplemental Regulations under the provisions of G.L. c.7, § 50 and G.L. c.32, § 21(4). (Regulation available upon written request)

NOTES TO FINANCIAL STATEMENTS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

NOTE 4 - ADMINISTRATION OF THE SYSTEM

The System is administered by a five person Board of Retirement consisting of the Chairman who shall be a member ex officio, a second member appointed by the governing authority, a third and fourth member who shall be elected by the members in or retired from the service of such system, and a fifth member appointed by the other four board members.

First Member	Timothy A. Bassett	Term Expires	12/31/2008
Second Member	James D. Cashman	Term Expires:	12/31/2006
Elected Member:	William P. Martineau	Term Expires:	12/31/2006
Elected Member:	Glenn C. Morse	Term Expires:	12/31/2004
Appointed Member:	Katherine O'Leary	Term Expires:	6/30/2009

The Board members are required to meet at least once a month. The Board must keep a record of all of its proceedings. The Board must annually submit to the appropriate authority an estimate of the expenses of administration and cost of operation of the system. The board must annually file a financial statement of condition for the system with the Executive Director of PERAC.

The investment of the system's funds is the responsibility of the Board. All retirement allowances must be approved by the Retirement Board and are then submitted to the PERAC Actuary for verification prior to payment. All expenses incurred by the System must be approved by at least two members of the Board.

The following retirement board members and employees are bonded by an authorized agent representing a company licensed to do business in Massachusetts as follows:

Treasurer - Custodian:)	
Ex officio Member:)	\$30,000,000 Fiduciary Liability
Elected Member:)	MACRS Policy
Appointed Member:)	
Staff Employee:)	

NOTES TO FINANCIAL STATEMENTS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

NOTE 5 - ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by The Segal Company as of January 1, 2002.

The total actuarial liability was	\$ 287,390,715
System assets as of that date were (actuarial value)	218,346,198
The unfunded actuarial liability was	\$69,044,517
The ratio of system's assets to total actuarial liability was	76.0%
As of that date the total covered employee payroll was	\$ 85,005,338

The normal cost for employees on that date was

8.31% of payroll

The normal cost for the employer including estimated

administrative expenses was

7.54% of payroll

The principal actuarial assumptions used in the valuation are as follows:

Investment Return: 8.50% per annum Rate of Salary Increase: 5.00% per annum

GASB STATEMENT NO. 25, DISCLOSURE INFORMATION AS OF JANUARY 1, 2002

Actuarial Valuation	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Cov. Payroll
Date	(a)	(b)	(b-a)	(a/b)	(c)	((b-a)/c)
1/1/2002	\$218,346,198	\$287,390,715	\$69,044,517	76.0%	\$85,005,338	81.2%
1/1/2000	\$190,363,700	\$253,847,100	\$63,483,400	75.0%	\$69,525,900	91.3%
1/1/1999	\$180,034,700	\$268,386,000	\$88,351,300	67.1%	\$89,645,300	98.6%
1/1/1998	\$151,293,900	\$245,965,100	\$94,671,200	61.5%	\$85,785,000	110.4%

NOTES TO FINANCIAL STATEMENTS (Continued)

FOR THE FOUR YEAR PERIOD ENDING DECEMBER 31, 2002

NOTE 6 - MEMBERSHIP EXHIBIT

Retirement in Past Years	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Superannuation	52	27	56	44	16	57	2	48	7	32
Ordinary Disability	0	0	0	1	2	4	1	2	0	(
Accidental Disability	1	0	1	3	0	3	0	1	0	(
Total Retirements	53	27	57	48	18	64	3	51	7	32
Total Retirees, Beneficiaries and Survivors	1,426	1,409	1,411	1,400	1,425	1,477	1,454	1,509	1,444	1,480
Total Active Members	2,519	262	2,806	2,917	3,251	3,401	3,027	3,135	3,271	3,300
Pension Payments										
Superannuation	\$6,309,089	\$6,510,221	\$6,723,744	\$6,959,721	\$7,503,419	\$8,005,617	\$8,683,752	\$9,574,446	\$9,898,380	\$10,527,968
Survivor/Beneficiary Payments	774,496	820,422	785,194	804,619	784,460	779,237	799,789	899,405	937,488	977,893
Ordinary Disability	258,049	236,822	241,411	227,048	248,552	313,518	304,553	312,949	309,718	288,299
Accidental Disability	1,296,580	1,380,265	1,428,824	1,437,464	1,526,864	1,539,724	1,565,189	1,627,756	1,677,851	1,741,172
Other	999,442	1,125,572	1,172,449	1,238,145	1,307,488	1,410,249	1,479,808	769,809	1,590,101	936,365
Total Payments for Year	\$9,637,656	\$10,073,302	\$10,351,622	\$10,666,997	\$11,370,783	\$12,048,345	\$12,833,091	\$13,184,363	\$14,413,537	\$14,471,698

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